

Dr. Blaxall's Report to the Local Government Board on the Sanitary Condition of the Rural Sanitary District of South Stoneham, Hants.

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CERTAIN of the residents and ratepayers of Freemantle having made application for a Government inquiry into the sanitary condition of their town, on the ground that the water-supply was exposed to pollution, the town unprovided with sewerage, and cesspit nuisances generally prevalent; and the Board's Inspector, Mr. B. Fleming, having in various reports had occasion to animadvert upon the manner in which the Public Health Act was administered throughout the South Stoneham Rural Sanitary District, I was instructed to inspect the district and report upon these subjects. Ground of inquiry.

The Rural Sanitary District of South Stoneham is comprised within the Registration District and Union of South Stoneham, which are conterminous, and which include also the Urban District of Shirley, and part of the Borough of Southampton. Preliminary.

The Rural Sanitary District contains numerous populous towns and villages, and covers an area of about 26,000 acres, lying in a general direction from north-west to south-east, parallel with the estuary of the Southampton Waters which forms its south-western boundary. The Urban Sanitary Districts of Shirley and Southampton cut deeply into the district at its western extremity. The country is hilly in character, fertile, well wooded, and watered by numerous streams and rivers. The principal of these are the Hamble on the east, and the Itchin, which flows through the district from north to south, dividing it unequally, the greater portion being to the eastward of the river. Description general.

Geologically, the district consists of porous gravelly soil varying in depth from two to 15 feet or more, overlying the Bracklesham beds, which are mostly clay. Geology.

In 1871 the population of the entire Registration District was returned at 32,201 persons, of which about 22,609 resided in the Rural Sanitary District. I am informed, however, that since the last census the population has considerably increased in parts immediately adjoining the borough. The industries are various, including ship-building, chemical works, and brick-making, besides which a number of men find employment on the railways, as well as in agriculture and in seafaring operations. Population.
Industries.

I made personal inspection of the principal towns and villages, including Freemantle, Millbrook, Redbridge, South Stoneham, North Stoneham, Eastleigh, Chilworth, Bitterne, West End, Woolston, Itchin, Hound, Hamble, Bursledon, Botley, &c., &c. In proceeding to give the results of my inspection my remarks must be understood to apply to the district generally, except where exceptional circumstances call for special mention of any individual locality.

SANITARY CONDITIONS.

Throughout the towns and villages of this extensive district I found an entire absence of efficient sewerage. Such sewers as do are very imperfect in character, while many places are wholly devoid of any provision of the kind. As a consequence slop nuisances generally prevail, the waste water either soaking into and saturating the soil in the vicinity of dwellings, or stagnating in puddles and unpaved gutters. In some instances, sewers originally designed for carrying off surface water from the roads only, have been made to serve for general drainage purposes, for which, by reason of their construction, they are eminently ill adapted, permitting leakage and favouring stagnation of contents. In other instances sewers, as at Woolston and Eastleigh, have been laid down by private individuals or companies, for the drainage of their own property, without any supervision or control having been exercised on the part of the Sanitary Authority, to whom Sewerage.

it would have seemed almost a matter of indifference whether the district under their jurisdiction was provided with proper sewerage or not. At Woolston the sewers laid down by private individuals extend to some three or four streets in the lower part of the town. They consist of glazed earthenware pipes discharging into a large brick culvert, which, after receiving also the contents of a brook flowing from Bitterne, has an open course through meadows, then passes at the back of a row of houses in Netley Road, and ultimately empties into the Southampton Waters. This open sewer has been the subject of great complaint, especially from the inhabitants of the terrace on Netley Road, the sewage in dry weather stagnating and creating great nuisance. At Eastleigh the Railway Company have laid down a sewer to carry off the contents of the closets on their premises. This sewer, constructed of glazed earthenware pipes, is led a short distance down the line, where it empties into a large pervious cesspit, loosely covered over with boards. In its short course it receives drainage from several houses, and from the closets belonging to Tait's Terrace. The drains from these latter, however, being formed of butt-ended pipes, the probability is their contents never reach the sewer, but, leaking away, soak into the surrounding soil. No provision is made for the ventilation of any of these sewers.

Freemantle calls for special mention as being the locality referred to by the memorialists. It comprises an area of about 190 acres lying between the Urban Districts of Southampton and Shirley, with a general fall towards the Southampton Waters. The town, containing several hundreds of inhabited dwellings, has been built within recent years, and in parts is quite suburban in character, possessing broad open roads with many detached or semi-detached villa residences. The locality, however, is entirely unprovided with sewerage, the people having to dispose of their slop and waste water as best they can. This is commonly effected by means of drains leading to so-called "dead-wells" that are underground cesspits, and receive also the discharge of privies. These cesspits being pervious, the liquid matters soak away and saturate the surrounding soil, until at length this becomes so water-logged as to be incapable of receiving more moisture. The result is, that the "wells" burst up, or the liquid being forced back overflows at the drain inlets. To remedy this evil a new well is then sunk to receive the overflow of the old one, thereby increasing the soakage area. Some idea of the extent to which such saturation goes on may be inferred from the fact that hundreds of these "dead-wells" exist at Freemantle. It is much to be regretted that some proper system of sewerage was not drawn up when the area was laid out for building purposes, in order that the houses as they were erected might have fitted in with this scheme. The locality would appear to offer every natural facility for drainage, and the question is merely the best way of ultimately disposing of the sewage, which to practical men in earnest should present no serious difficulty.

Excrement
removal and
disposal.

The means of excrement removal in common use throughout the district are privies which discharge into receptacles somewhat differing in character, but all situated beneath the surface, and designed for the storage of excrement in large quantities, usually in a wet state. In many instances these receptacles are the "dead-wells" already referred to, which are by no means peculiar to Freemantle, but are met with in various parts of the district. In other instances the pits are of the ordinary kind placed immediately beneath the privy floor, or at the back of the privy structure, either open or loosely protected by boards. In either case slop and waste water is often mixed with the contents; and as the pits are pervious, the extent to which the soil is befouled by excremental filth may readily be conceived, while the closed pits being unventilated the closets are rendered highly offensive. I did not meet with any closets situated indoors, but in all probability such do exist, in which case they must constitute a serious danger to health, as offering a ready means for the introduction of foul air from the cesspits to the dwellings. The same must be the case also with regard to sink drains from kitchens in direct communication with cesspits, instances of which came under observation. The situation of many of the "dead-wells" is, so far as my experience goes, unique. They are not infrequently placed under the public footpaths and roads, where their position is occasionally made known to passers-by through

the bursting forth of the liquid contents at the surface, creating a nuisance which is loudly complained of, persons stating that they not only suffer from the stink but actually walk into the filth. At Woolston a horse broke through the road to one of these dead-wells, and a similar occurrence took place at Freemantle, where a little boy afterwards fell into the same hole. With regard to the cesspits generally, the contents are allowed to accumulate for an indefinite period, varying from three or four months to many years, the process of cleansing being deferred to such time as the pits become filled to overflowing.

I visited several of the schools and found the privy accommodation, with one exception, to be of the same objectionable character as that already described, while some of the privies were revoltingly filthy and neglected. This is a state of things the more to be deprecated where children are concerned, as such association with filth cannot but tend to render them callous and indifferent as to habits of cleanliness when they grow up. The notable exception was the privy belonging to St. Mark's Board School in St. Mary Extra, which was by far the most cleanly of all the school privies visited. Here the privy contents are kept dry by the school sweepings being thrown on them every evening. I explained to the schoolmaster that it would be far better to substitute dry earth for these sweepings.

I am informed that in some parts of Woolston a few earth-closets have been introduced, but the only locality in which I met with these desirable innovations was at Sholing. Here earth-closets have been provided for four cottages recently built by Mr. Dannford, and the cottagers highly appreciate the advantages these closets possess over the stinking privies to which they had been accustomed.

I subjoin some examples of excremental nuisance, combined with occasional water pollution :

(1.) *Millbrook.* (a) Slade's Cottages. Two privies discharge into one closed cesspit cleared out about every 12 or 18 months. The soil-pipe gets choked, causing the contents to overflow on to the yard.

(b) Giddon's House. Privy situated in a confined yard about eight yards from the back door of the dwelling, and at a higher level. The cesspit was so full that the contents might be seen oozing out under the seat, while the yard contained pools of stagnant slop water.

(c) Coward's Cottages. Privy 18 feet from the back doors. Cesspit full, contents oozing out under the floor. The cottagers complained of this three weeks since to the Inspector of Nuisances, but nothing has been done. About 12 feet distant from the privy is the well which supplies the drinking water. Water is sometimes thick and stinking.

(2.) *Redbridge.* Phillips' Cottages. Five families use three privies which discharge into one closed cesspit, cleared out about once in every two or three years. A short time since the contents overflowed, and to obviate this evil an overflow pipe was led from the cesspit to a drain that goes to the street sewer. The well that supplies the drinking water is situated in the garden, and the water is said to be so bad that the people cannot drink it.

(3.) *Whimpstone Schools.* The privies discharge into a trough, along which the contents pass to a small catchpit, thence by overflow pipes to two covered cesspits, and so on to an open ditch. The privies were flooded with filth, while the pump water which serves for the purpose of flushing the trough is said to partake strongly of the offensive character of the cesspit. Formerly the drinking water was obtained from a well situated about 17 yards from the school privies; but the water was found to be so highly polluted that its use was discontinued, and upon examination it was found that the bricks of the well in the direction of the privies were black and stinking.

(4.) *Newman and Green's Cottages.* The privies discharge into a closed cesspit which overflowed, and for weeks the contents filled the pan. The water of the well, situated close to the privy, stinks so much that the people cannot use it.

(5.) *Whimpstone Square* affords exaggerated examples of privy nuisance, together with stagnant slop and waste water in trenches and by the side of the road.

(6.) *Freemantle.* (a) Stanley Terrace. Four privies discharge into one "dead-well" situated under the public road called "Russell Terrace." The contents overflow at the drain inlet near the back door of Mrs. Herbert's cottage, stinking fearfully. Mrs. H. complains much of head-ache, nausea, &c. Three other "dead wells" are situated in the same vicinity. Recently, one of these burst up, and the contents continued to overflow the road for a fortnight.

(b) Gladstone Terrace. Cesspits, situated under the floors of the privies, had not been cleaned out for three years, and were overflowing, creating such stink as to compel the people to keep their doors shut. Formerly these privies were situated close to the dwellings, and the contents soaked under the floors of the dwellings, but upon "Fever" breaking out in the terrace about three years ago, Mr. Dayman, Medical Officer of Health, caused the privies to be removed to a greater distance.

(c) Millbrook Road. Mr. D. has been obliged to sink a fourth "dead-well" in his garden, and he states when that fills up he does not know what he shall do, as he has no ground space available for another well. On the opposite side of the road to Mr. D.'s a "dead-well" recently burst up, stinking fearfully.

(7.) *Sholing, Middle Road.* Cross and Giles' Cottages. Privies adjoin the dwellings, and discharge

into closed cesspits which overflow and saturate the foundation of the dwellings. The sink pipe in Giles' kitchen leads to the same cesspit, giving rise to such effluvia that it has been stopped up. Mrs. Giles suffers much from head-ache, which she attributes to the stinks. The well from which the drinking water is obtained is about 12 feet deep, and situated about 15 feet from the cesspits: the water is so bad that the people are afraid to use it. The privies belonging to two neighbouring houses are of a similar description, one overflowing and causing much nuisance.

(8.) *Itchen.* Banks Court. A confined triangle measuring 14 feet at the base and one foot at the apex. Six houses open into it. One privy used by 11 families living in this court discharges into a cesspit which overflows, creating great nuisance; besides this there is an open slop drain which is also offensive.

(9.) *Pear Tree Green.* Privies belonging to six houses discharge into a "dead-well" which receives also slop water. At the time of my visit the contents had burst up from the well, and liquid filth being driven back was overflowing Mrs. Mackintosh's kitchen, her sink drain going to the same "dead-well." On a former occasion when a similar occurrence took place it was found necessary to lay bricks down on the kitchen floor to walk on, and to keep the front door open to let in the fresh air, much to the annoyance of passers by, who complained of the stink proceeding from the house.

Examples of a similar nature to the above are met with throughout the district, but the foregoing may suffice for the purposes of this Report.

Water-
supply.

Hitherto the water-supply of the district has been mainly derived from shallow wells sunk through the gravel to the clay, at a depth varying from 4 or 5 to 15 or 20 feet. They are usually steined in red brick, uncemented for the express purpose of allowing water freely to drain into them at their sides, as well as to rise up into them from the bottom. The wells are very numerous, one well being allotted to each house, or one to every three or four houses or more. In view of the permeable character of the surface soil, and the extent to which this is everywhere befouled by excremental filth, and saturated with slop and waste water, to say nothing of contaminations in the shape of manure and refuse heaps, it is obvious that the supply from these wells is generally and seriously endangered. This danger is the more imminent where, as is frequently the case, the wells are in close relation to privies or "dead-wells." Throughout this inquiry I received numerous complaints of the water not being fit to drink, and this was confirmed in some instances by the results of analysis. Thus, at Freemantle the wells are regarded as generally polluted, and one of the residents, an analytical chemist, told me that he did not consider any of the water safe for drinking purposes, having analysed specimens from various wells, and finding them all to contain abundant evidence of filth contamination. Moreover, the rector stated that he had been led to sign the petition praying for a Government inquiry from the fact that his parishioners, on his advocating temperance, urged that they were obliged to have recourse to beer, as the water was so bad that they were afraid to drink it.

With regard to other sources of supply, I found that at Chilworth the people obtain water from a spring that issues from a neighbouring hill. The water, through the agency of a private gentleman, has been conveyed by pipes to the village below. The spring is exposed to casual fouling by cattle, but it would seem necessary only to protect it from such pollution to insure to the villagers a plentiful supply of wholesome water. Again, at Woolston certain of the residents have a water-supply which is said to come from a cliff. The water is piped for a certain distance, but I could not obtain sufficient information as to its source, or the nature and extent of the pipes, to enable me to express an opinion as to the purity of the water. It is, however, held in good repute, and the supply is said to be plentiful.

With regard to the facility that exists for substituting water derived from extraneous sources for the dangerous wells now in general use, I may state that, ascertaining that the South Hants Water Company was incorporated in 1876 for the express purpose of supplying this and the adjoining district of Romsey with water, I called upon Mr. Crew, the Chairman of the Company, who courteously supplied me with every information. It appears that the water is derived from two wells situated at Mitchelmersh, about three miles to the north of Romsey, sunk in chalk to a depth of 45 feet. From the wells the water is pumped up to a reservoir at Bassett, about $9\frac{1}{2}$ miles distant, and situated in the South Stoncham Rural Sanitary District, whence the water is conveyed to various towns and villages, the mains having recently been laid on to Freemantle, Millbrook, Eastleigh, and other places in this district. The reservoir is covered in and has a capacity equal to about

600,000 gallons. The conduit pipes are of iron, protected by Dr. Angus Smith's varnish. It is contemplated that the supply shall be on the continuous system, and the yield is reported as sufficient to allow 20 gallons per head per day to 40,000 persons, and could be considerably increased at a very small additional cost. As to the purity of the water, I was informed upon inquiry that no cesspit or other contaminating circumstance exists in the vicinity of the wells, and that the regulations of the Company prohibit direct communication between the water mains and waterclosets. Further, Mr. Ogston, analytical chemist, of Mincing Lane, London, having subjected a sample to analysis, reports that "for potable purposes nothing can be better than this water." Under these circumstances it would seem that it is calculated to supply a very urgent necessity of this district.

Many instances came under observation of polluted wells, but several examples having already been given in connexion with excremental nuisances I will merely cite the following:—

(1.) *Woolstone* (a) *St. John's Road*. The water from Mrs. Flint's well stinks abominably, leaving no doubt that it is polluted by the contents of a "dead-well" in its near vicinity. The Medical Officer of Health informed me that on one occasion when carbolic acid was thrown down one of the privies in this road, it found its way to a well belonging to a house some 70 or 80 feet off, and in such quantity that it was found impossible to make satisfactory analysis of the water.

(b) The water from Mrs. G.'s well, also in *St. John's Road*, was found to be stinking, and upon examination it was ascertained that a closet-drain passing close to the well was broken, the contents escaping and percolating into the well.

(2.) *Hound*. *Netley Cottage*. Well about 15 feet deep; percolation going on at the sides. Water reported to be highly polluted. About 40 feet distant from the well is situated a privy with closed cesspit, and near this a pool of stagnant water containing vegetable refuse; also an offensive catchpit for waste water about 2 feet deep.

(3.) *Botley*. *Abraham's Cottage*. Well situated about 11 feet from a catchpit. Water said to stink sometimes, and to bear traces of soakage from the catchpit in the form of soap suds.

(4.) *Botany Bay*. A dip-well situated in a garden, the water reported to be highly polluted. The privy discharges on the surface, the filth coursing down the garden in the vicinity of the well, to the imminent danger to the water.

(5.) *Freemantle*. *Victoria Road*. Well formerly situated about 6 or 8 feet from a "dead-well," but the water got so bad that a new well was dug about 8 feet further off, with no better results, the water being still so polluted as to preclude its use. A well belonging to the houses on the opposite side is also near a privy, and the water is characterised as "beastly."

Manure and refuse heaps, as well as pigsties, are occasionally met with in unwholesome relation to dwellings. The keeping of cows, moreover, is a subject to which, in connexion with the dairies, I would make special reference, for not only is the water used for dairy purposes usually obtained from wells eminently exposed to pollution, but some of the dairies I observed to be situated in the midst of filthy surroundings. A notable example was met with in a yard at Millbrook. Here within a circumscribed area, measuring about 120 feet long and from 50 to 70 broad, are situated the dairy and well, and a large shed in which several cows are kept. Close to this is a huge manure heap (36 × 12 feet), drainage from which goes to a large cesspit (11 × 6 × 4 feet), which receives the discharge of the house drains and privies (five in number) of Romsey Terrace. The cesspit, moreover, has an overflow pipe to an adjoining stagnant pool at the head of a ditch, which receives also drainage from the Oliver Cromwell Inn, and which gives forth very offensive exhalations. In short, it would be impossible to conceive a more revolting assemblage of nuisances than is exhibited on this limited spot. The dairy is about 15 yards from the cesspit, and contains the well, which is about 7½ feet deep, and which from its position cannot be regarded as otherwise than exposed to danger. Happily the milk is not allowed to stand for any time in the dairy, otherwise from its known properties of absorption, exposure to such a foul atmosphere would be attended with imminent risk of pollution.

Piggeries
and other
nuisances.

A great portion of the dwellings in this district having been erected in recent years, the houses as a rule are comfortable, well arranged, and in a good state of repair. But the advantages they possess are to a considerable extent neutralized in a health point of view from the dampness of the soil on which they stand, resulting from waste and other water being allowed to accumulate in the soil instead of being carried off by proper drains and sewers. Some of the dwellings, moreover, are exposed to privy nuisances and to the danger of foul air from the cesspits being introduced into them by means of sink-drains situated within doors. In the older parts of the

Dwellings.

district, such as North Stoneham, Botley, Chilworth, Burgess Street, Bassett Green, &c., I met with houses in a state of dilapidation, two or three being so bad as to suggest the danger of their falling in, and they are in their present state quite unfit for habitation.

Sickness and mortality.

Some difficulty was experienced in obtaining correct data for determining the mortality of this district, owing to the deaths occurring in Shirley and part of Southampton being included with the rural district in the Registrar General's returns for the several sub-districts. Moreover, the death returns furnished to the Authority by the Medical Officers of Health were found to be so utterly incorrect as to render them valueless for statistical purposes. Thus, in No. 2 district, the death-rate was apparently so excessive (40 per 1,000), that I was led to seek explanation from the Medical Officer of Health, when it turned out that he had included in his Return a part of the Borough of Southampton which belonged to his *Poor Law* District, instead of limiting his return to his *Sanitary* District. Again, in No. 1 district, the deaths were represented to have increased from 58 in 1876 to 102 and 97 in 1877 and 1878 respectively, whereas I found upon inquiry that the actual number of deaths amounted to 64 in each of the two years. (The error, it should be stated, rested with the printer.) The return for No. 3 district gave 90 deaths in excess of what actually took place, and this the Medical Officer of Health was unable to explain. Errors also occurred in the returns for districts Nos. 4 and 5. With the assistance of the Registrars I was enabled, on going carefully through the death registers, to apportion to the several Sanitary Districts their relative mortality, and to prepare the following table of statistics showing the general mortality and the mortality from certain specified causes occurring in this Rural Sanitary District during the last $5\frac{1}{2}$ years, 1874-79. It should be stated that the Royal Victoria Hospital, Netley, is *not* included in the Return.

TABLE 1.—Mortality Statistics of the Rural Sanitary District of South Stoneham (exclusive of Netley Hospital) for $5\frac{1}{2}$ years, 1874-79: Population 21,720.

Year.				Small-pox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	"Fever."	Diarrhoea.	Total Mortality from the seven principal Zymotic Diseases.	Phthisis.	Pneumonia and Bronchitis.	Total Mortality from Phthisis, Pneumonia, and Bronchitis.	Deaths from all causes.
1874	-	-	-	—	1	—	4	5	5	9	20	38	44	82	355
1875	-	-	-	2	—	29	3	2	5	6	48	38	59	97	418
1876	-	-	-	—	1	41	4	2	10	8	65	38	39	77	368
1877	-	-	-	—	5	6	—	10	6	6	37	33	57	90	381
1878	-	-	-	1	9	—	—	13	6	7	36	37	59	96	382
Six months, Jan.-June } 1879	-	-	-	—	4	15	—	2	2	2	25	14	23	37	226
Total	-	-	-	3	20	91	11	34	34	38	231	198	281	479	2,130
Mean annual rate per 1,000 of the population	-	-	-	—	—	—	—	—	—	—	1.92	1.65	2.34	4.0	18.0

It will be seen by the above table, that Scarlatina was epidemic in 1875-76, and again in 1879; that "Fever" was annually present, resulting in 34 deaths; and that the seven principal zymotic diseases contributed 231 deaths, or rather more than 10 per cent. to the total general mortality (giving a mean annual rate of 1.92 per 1,000 of the population. These are diseases generally held to be in large measure preventible by proper sanitary arrangements. Phthisis and other lung diseases, also more or less preventible, caused 479 deaths. There can be no doubt that under efficient sanitary administration the mortality would be considerably reduced.

Referring especially to Freemantle as having been the subject of special memorial to the Local Government Board, it is instructive to note that the mortality statistics of No. 3 district, of which Freemantle forms the chief part, compare very unfavourably with the remainder of this Rural Sanitary District, as will appear by reference to the subjoined tabular statement.

TABLE 2.—Mortality Statistics for 5½ years 1874–79.

District.	Population.	Deaths from Seven Principal Zymotic Diseases.	Deaths from Phthisis, Pneumonia, and Bronchitis.	Total Deaths from the foregoing specified Diseases.	Total Deaths from all causes.
Rural Sanitary District, exclusive of No. 3 district - -	15,205	143	312	455	1,416
Mean annual rate per 1,000 of the population - - -	—	1·7	3·76	5·44	16·93
No. 3 district - -	6,515	88	167	255	714
Mean annual rate per 1,000 of the population - - -	—	2·45	4·6	7·11	19·9

It will be seen by the above table that the special and general death rates of No. 3 district are 7·11 and 19·9 per 1,000 respectively, against 5·44 and 16·93 per 1,000 for the remainder of the district. In other words, the mortality from these causes distributed over a population of 10,000 persons, would give 71 deaths from diseases more or less of a preventable character, and 200 from all causes in the No. 3 district, against 54 and 169 in the remainder of the rural district.

The Sanitary Authority act in their collective capacity, no parochial committee having been formed under section 202 of the Public Health Act, 1875.

Sanitary administration.

The Poor Law Medical Officers, Messrs. Pern, Ives, Dayman, Shiels and Symonds are the Medical Officers of Health for their respective districts. Their appointments have been renewed from time to time, but with the modified approval only of the Local Government Board, who have on each occasion referred the question back to the Authority for reconsideration. Each officer receives a salary of 20*l.* per annum, but no portion of this is paid by the Local Government Board. I should state that shortly prior to my visit Mr. Shiels resigned his appointment for No. 4 district. The Medical Officers of Health receive quarterly returns only of mortality, but this is not of so much importance, seeing that their duties as Poor Law Medical Officers render them acquainted with the sickness that exists, and at the same time afford them opportunity of becoming acquainted with the sanitary circumstances of their districts. They have submitted to the Local Government Board annual returns of mortality, accompanied by written reports, but these latter have been so meagre of information respecting the circumstances of the districts as to render them of little or no value. With regard to the performance of their duties generally it is manifest that the Medical Officers of Health have failed to appreciate the responsibilities attaching to their office, inasmuch as they have neglected to recommend in these reports the adoption of any comprehensive measures to remedy the sanitary evils which characterise this district. The action taken by them in this direction has been limited to effecting certain improvements in individual dwellings, and securing temporary abatement of certain exaggerated nuisances which for want of more timely measures had become intolerable. Epidemic disease of a fatal and highly contagious character has from time to time been present in this district, but it would appear that the Medical Officers of Health have failed to point out to the Authority the need for any special means for dealing with those cases that could not be properly isolated or treated in their own homes. During the present year 14 deaths from scarlatina have occurred at Freemantle, representing some 140 attacks or more. I visited several of the houses in which the disease had been fatally present, but in no instance could I learn that any precautionary measures had been taken either by direction of the Authority or of the Medical Officer of Health to prevent the spread of the disease. In this unnecessary danger to the public health, not only the inhabitants of Freemantle were concerned, but also the adjoining towns of Southampton and Shirley, with which free intercommunication takes place.

Messrs. Cox, Bush, and Nesbitt have been appointed Inspectors of Nuisances with salaries of 20*l.*, 30*l.*, and 40*l.* per annum respectively, but they are not required to devote any defined portion of their time to the duties. The inspectors have not kept a continuous record book, but they have repeatedly brought under notice of the Authority the existence of excremental nuisances, while their report books contain numerous entries of nuisances arising from pigsties, manure heaps, stagnant slop-water, &c., the same nuisances forming over and over again the subject of notices. For example, a dead-well at Woolston is entered in Mr. Nesbitt's report book on eight separate occasions between 21st March and 22nd July, 1879, as causing nuisance by overflowing on the public path, the Inspector of Nuisances remarking that "owing to the want of proper drainage nothing definite can be done." Again a cesspit nuisance at Eastleigh was reported by Mr. Cox eleven times between the 12th of June and 11th November, 1878, without any record of observation respecting it having been made by the Authority. But while it is in evidence that the Authority have from time to time been made acquainted with the condition of their district, I should state that hundreds of instances occur in Messrs. Nesbitt's and Cox's report books where the entry is simply "Nothing to report." Such entries are difficult to reconcile with the existing state of things. Either they are due to the want of zeal on the part of these officers, or to the fact that, finding that their reports resulted in little or no practical good, they have become contented to confine their attention to nuisances of the most flagrant description only.

From the details already given in this Report with regard to the prevalence of excremental nuisance, the exposure of the water-supply to pollution, and the total absence of efficient sewerage, together with the neglect of precautionary measures to prevent the spread of dangerous infectious disease, it is plain that the Sanitary Authority have signally failed to employ the powers vested in them by the Legislature for the protection of the public health, and for the improvement of their district. During the last 12 or 15 months upwards of 160 cases of excremental nuisances have been reported, many of them recurrent and of such a nature that had the authority, with the assistance of an efficient officer of health, devoted attention to the subject, they could not have failed to see the necessity of dealing with them. I should mention that at an interview I had with the clerk, he stated, on my referring to this subject, that Mr. Dayman, Medical Officer of Health of No. 3 district, had expressed it as his opinion that cesspit privies, next to earth-closets, were the best means of disposing of the excrement of the population.

In conclusion, I cannot too strongly urge the vital importance of immediate and comprehensive measures being taken by the Authority to remedy the evils revealed by my recent inspection as generally prevalent throughout the district. I may add that the relative position of Freemantle and Shirley is such as to render it, in my opinion, highly desirable they should for sanitary purposes be combined into one district.

F. H. BLAXALL.

September 1879.

Recommendations.

(1.) It is desirable that Parochial Committees should be formed (Public Health Act, 1875, section 202) to attend to the sanitary requirements of the large and populous parishes of the district.

(2.) In lieu of the sanitary district being subdivided, as at present, among several Medical Officers of Health, one Officer should be appointed for the whole district; and he should be required to perform the duties of his office in accordance with the Local Government Board's Regulations of November, 1872. So also one or more Inspectors of Nuisances should be appointed for the whole Rural Sanitary District, who should be required to devote all their time to the duties, and should be instructed as to the various duties imposed upon them by the Local Government Board Regulations of 11th November 1872.

The Authority should consider the desirability of consulting with the Sanitary Authorities of Southampton and Shirley as to the propriety of

combining for the purpose of appointing one Medical Officer of Health for the three districts. The districts are so intimately connected, and the intercourse between them so frequent and free, that the appointment of one officer acting for the whole area would result in much public good, and the amalgamation would allow of such a salary being given that the officer could be required to devote his whole time to the duties of his office.

(3.) All populous parts of the district should be provided with proper sewers or other channels for the removal of slop, waste and surface water (Public Health Act, 1875, sections 15, 19, and 23). Care must be taken for the disposal of the sewage in such a manner as not to be productive of nuisance. With respect to Freemantle and Woolston, it is an urgent necessity that this should be done with as little delay as possible. A skilled engineer should be consulted as to the best way of carrying out this recommendation.

(4.) In place of the unwholesome privies now in use, some such method of excrement removal and disposal should, without delay, be substituted as will avoid nuisance or injury to health. The Authority should see that every house is provided with suitable privy accommodation, and should exercise strict supervision to insure the privies being kept in a wholesome condition (Public Health Act, section 40). It would appear that some dry system would best meet the requirements of the rural portion of the district. For information upon this subject reference should be made to the Report to the Local Government Board, "On certain means of preventing excremental nuisances in towns or villages."

(5.) Means should be taken to insure to each village an adequate supply of wholesome water (Public Health Act, section 51). No privy-pit, dung-heap, pigsty, or other source of pollution should be permitted in the near vicinity of wells or of other sources of supply. The Sanitary Authority should, after satisfying themselves as to the purity of the water introduced into their district by the South Hants Company, encourage the use of this supply in lieu of that now obtained from wells, which, from their situation, are eminently exposed to the risk of pollution. Where wells are proved to be polluted, proceedings should be taken under sections 62 & 70 to close them, and to substitute pure water from another source, such as from the mains of the Water Company.

(6.) Pigs or other animals should not be permitted to be kept in situations where they produce nuisance injurious to health. Manure and other refuse heaps should not be stored in the vicinity of dwellings.

(7.) Proceedings should be taken under the provisions of the Public Health Act, 1875, as to nuisances, to require the owners and occupiers to adopt the necessary measures to remedy such structural or other defects in dwellings or on their premises as are injurious to health.

(8.) The authority should provide a place for use as a hospital for the reception of cases of dangerous infectious disease (section 131). On this subject the authority may with advantage consult the departmental memorandum "On hospital accommodation to be provided by local authorities." A carriage for the conveyance of infectious cases (section 123), together with disinfecting chamber (section 122), and a mortuary (section 141) should be provided. Sections 120 and 121, relating to the disinfecting of dwellings and things, and 126 and 129, relating to the exposure of infected persons and things, and the letting of infected dwellings should be enforced.

